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Get America Talking: Implementing Advanced Care Planning in Primary Care

Sasha Recht

University of San Diego, stenio@sandiego.edu

UNIVERSITY OF SAN DIEGO

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Sasha Recht

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Joseph Burkard DNSc, CRNA, Faculty Advisor

Ali Alamar MD, Clinical Mentor

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Sasha Recht

University of San Diego

Abstract

Advanced Care Planning (ACP) is an essential part of providing adequate care in the primary care setting. Discussing end of life with patients can be a tedious and uncomfortable conversation for many providers, however, its continued avoidance contributes to the stigma of end of life care and may also result in significant healthcare cost expenditure with the use of unwanted invasive treatments. All providers should engage in consistent advanced care planning in order to improve patient and provider communication, improve patient satisfaction, increase advanced directives on file, reduce the stigma of the topic, and improve quality of life.

Get America Talking: Implementing Advanced Care Planning in Primary Care

Due to the technology that exists in modern medicine, the common path of treatment for severe ailments and critically ill patients includes ventilators, dialysis machines, extracorporeal membranous oxygenation (ECMO), and a plethora of medications to keep patients hemodynamically stable. Upon initial cardiac arrest, the standard emergency treatment is cardiopulmonary resuscitation (CPR), which is a lifesaving, but very invasive measure (Pozner, 2021).

If the patient survives CPR efforts, the likelihood of suffering other consequential ailments such as broken ribs or collapsed lungs is high and may impact quality of life. Furthermore, the patient could be left in a persistent vegetative state following CPR depending on how long the brain suffered without oxygen supply (Podrid, 2019). Unfortunately, many patients are uneducated regarding end of life decisions, invasive treatments, and overall CPR survival outcomes. Patients perceive CPR survival at upwards of 70%, while the actual survival to discharge outcomes for post-CPR in-hospital and outside of hospital cardiac arrest patients are 6%-19% and 10% respectively (Podrid, 2019).

Only about 37% of Americans have an advanced directive on file indicating what life-sustaining measures they do and do not want (Yadav et al., 2017). For those hospitalized under emergent conditions with no directive on file, providers are obligated to assume and perform full invasive treatment, which is not only extremely costly, but may also result in performing treatments or procedures that the patient did not want. Over 25% of all Medicare's yearly spending is consumed by the 5% of patients in their last 12 months of life (Dinerstein, 2018). Furthermore, nearly 60% of hospital spending goes towards the last 3 months of life (French et al., 2017). These current expenditure percentages suggest a strong default to full invasive

treatments even among the sickest patients. This may be a result of having too few advanced directives on file, lack of patient education regarding the risks and benefits of invasive treatments, and ineffective communication regarding health care wishes between the provider and patient.

The combination of low patient education and provider hesitancy to initiate these conversations only contributes to the stigma of discussing death and the dying process, and since these conversations are not a required service, it is often avoided until absolutely necessary. When the conversation does arise, quality of life preferences are seldom a topic of discussion (Anderson et al., 2011). Exclusion of advocation for unbiased education on end of life, comfort-focused treatments, and early planning via advanced directives is only conducive to wasted medical costs and poor quality of life among critically ill patients. Despite several guidelines implemented to suggest the success of regular conversations about healthcare wishes, the hesitancy still exists, an inadequate number of advanced directives are still present, and patients are still uneducated on their options.

When medical providers take initiative to start the conversation, it is referred to as Advanced Care Planning (ACP). ACP is the process of discussing end of life options with a patient to determine medical wishes in the event of cardiopulmonary arrest and other medical emergencies in which the patient would no longer have the capacity to make medical decisions. These wishes can be solidified in many forms, including a typical advanced directive, a living will, and a Physician Orders for Life-Sustaining Treatment (POLST) form (Mayo Clinic, 2020).

Advanced directive forms vary by state and are typically an all-encompassing form that includes medical wishes and the designation of a durable power of attorney or healthcare proxy. POLST forms also vary by state but must be acknowledged regardless of the state of origin

(National POLST, 2020). POLST forms are a medical order that must be followed by all medical personnel, including paramedics and other emergency medical staff. This form typically includes orders for resuscitation, artificial nutrition, artificial airways, and comfort care. It must be signed by a physician, nurse practitioner, or physician's assistant (Mayo Clinic, 2020).

Considering the many different types of advanced directives and the life-altering decisions that may be included, these forms can be difficult for patients and families to complete. Many Americans feel uncomfortable with these difficult conversations and may avoid discussing end of life care simply because envisioning sickness can elicit a multitude of emotions. When completing these forms, it is important for the patient to know that they can be changed and updated at any time, as this often eases the pressure some may feel to commit to a particular decision.

Literature Review

In prospective studies and randomized trials, ACP leads to higher rates of completion of advanced directives, fewer hospitalizations at end of life, fewer invasive treatments at end of life, and a higher likelihood of providers and families complying with patient's wishes (Silveira, 2020). Other clinical outcomes include high patient satisfaction rates, improved communication, and lower risk of stress and anxiety among surviving relatives that are tasked with making medical decisions. The data from systematic reviews also show that ACP leads to increased quality of life for both the patient and the family, and reduced costs of end of life care without increasing mortality (Silveira, 2020).

ACP is relatively uncommon among frail elders due to challenges such as uncertain prognostication, poor education on end of life, decreased ability to participate, and family avoidance of the conversation due to taboo feelings and poor coping strategies (Combes et al.,

2019). A systematic review conducted by Combes et al. (2019) concluded that ACP must be started early, especially among frail elders in order to provide the biggest chance of engaging both cognitively and physically in the decision-making process. ACP should be presented in a way that emphasizes living well in the present while promoting the planning of the future in order to appeal to current frail elders. It is suggested that this approach would be more relatable to their daily lives and they may be more willing to participate. Furthermore, the review concluded that frail elders are more likely to engage in successful ACP if it is frequently integrated as part of their regular care. ACP must occur over time in a comprehensive and evolving way rather than in one event (Combes et al., 2019).

The American Medical Association (AMA) recognized ACP as a way to empower self-determination and decision making among patients, regardless of age or current medical condition (American Medical Association [AMA], 2020). The AMA outlined the following guidelines as part of their Code of Medical Ethics: Regularly engage all patients to evaluate their values and wishes on quality of life and medical decisions in the event of a life-threatening illness or injury regardless of current age or health status, answer questions about ACP to help formulate patient's decisions, explain how advanced directives are used as tools to articulate preferences and medical surrogate responsibilities, incorporate ACP into the medical record to be accessible when needed, and periodically review and update the ACP information as needed (AMA, 2020).

A policy brief released by the Institute of Medicine (IOM) in 2014 provided a detailed report with corresponding guideline suggestions regarding end of life decision making (Meghani & Hinds, 2015). Their research concluded that current providers who did not receive additional training on ACP are very ill-prepared to effectively carry out these discussions. They also

suggested that schools for health professions, including medical schools and nursing schools, lack adequate emphasis on end of life curriculum and seldom integrate sufficient teaching on the topic. The IOM also concluded that most Americans lack fact-based education about end of life options and are ill-prepared for a time when urgent or unexpected end of life care is needed (Meghani & Hinds, 2015). Based on this research, it is suggested that greater incorporation of ACP training may lead to greater provider comfortability with the topic, and therefore, more ACP conversations in practice.

The introduction of billing codes for ACP by the Centers for Medicare & Medicaid Services took place in January of 2016 and it allows providers to be reimbursed for ACP discussions with their patients (Ashana et al., 2019). Medicare will typically reimburse $86 for the first 30 minutes of ACP conversation under the Current Procedural Technology (CPT) code 99497, and up to $75 for an additional 30 minutes of conversation using CPT code 99498 when applicable (Belanger,et al., 2019; Kim et al., 2019). Despite this recent incentive to carry out ACP discussions, only 1.9% of Medicare beneficiaries had this CPT code billed for by a provider in the first year of implementation. In the first 3 quarters of 2017, that number only increased to 2.2% (Belanger et al., 2019). This does not necessarily indicate that the conversations didn't take place, but it does, however, attest to the low utilization of the billing codes as an additional incentive to initiate ACP conversations.

Intervention and Methods

This project was conducted in an independently owned primary care office in La Mesa, California. Permission to proceed with data collection was granted by the Institutional Review Board (IRB). A single educational handout was distributed by a medical assistant to all patients aged 55 and older upon checking in for their appointment, regardless of chief complaint or

reason for office visit. The educational handout included evidence-based and peer-reviewed information about end of life options and definitions found on a California POLST form (See appendix A). The patient was asked to read through the information while in the waiting room. Additional questions and concerns were addressed by the provider during the face-to-face visit, and the patient was then encouraged to fill out a POLST form during that encounter.

Patients were also provided with a survey during their visit which used a 4-point Likert-type scale to assess satisfaction with the education. The survey asked for only the patient's age and gender with no other identifiers necessary. Patients were asked their level of satisfaction with the ACP education they received, and response options included *not satisfied, somewhat satisfied, satisfied,* or *very satisfied.* Patients were then asked if they learned any new information, and if they felt comfortable discussing end of life decisions with their provider after receiving education. The medical assistant then collected the surveys and recorded any POLST forms that were completed, what the chosen code status was, and if the patient had Medicare insurance for billing purposes. All completed POLST forms were scanned into the Electronic Health Record (EHR) in a timely manner.

Model Framework

The Model for Evidence-Based Practice Change was used as a framework to guide this project. The model was published in 2009 by June Larrabee and is an updated version of the Model for Change to Evidence-Based Practice originally published in 1999 by Rosswurm and Larrabee (Larrabee, 2009).

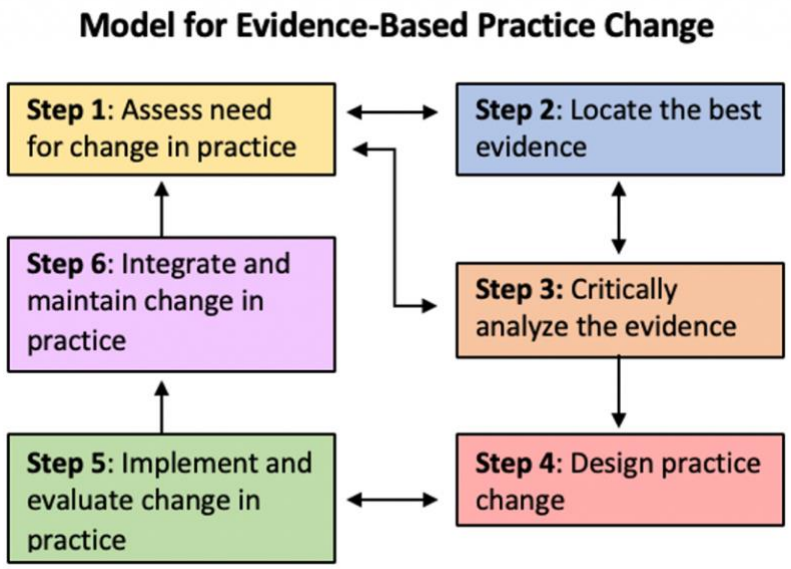
This framework is designed for ease of use and can be applied to many different types of clinical settings, quality improvement projects, research, and designing new practice guidelines. As can be seen in figure 1, it is a 6-step fluid framework that encourages the assessment of need

for change, evaluating the best evidence, designing and implementing practice change, and maintaining the change (Melnyk & Fineout-Overholt, 2015).

The only limitation this model possesses is the lack of specific guidance should one of the steps fail. Some other practice change models contain feedback loops that redirect and guide the subject based on the results achieved at each step of the process. However, because the Model for Evidence-Based Practice Change is fluid and contains very general steps to guide practice change, it is easy to frequently re-evaluate and re-design any project as necessary.

Figure 1

Model for Evidence-Based Practice Change



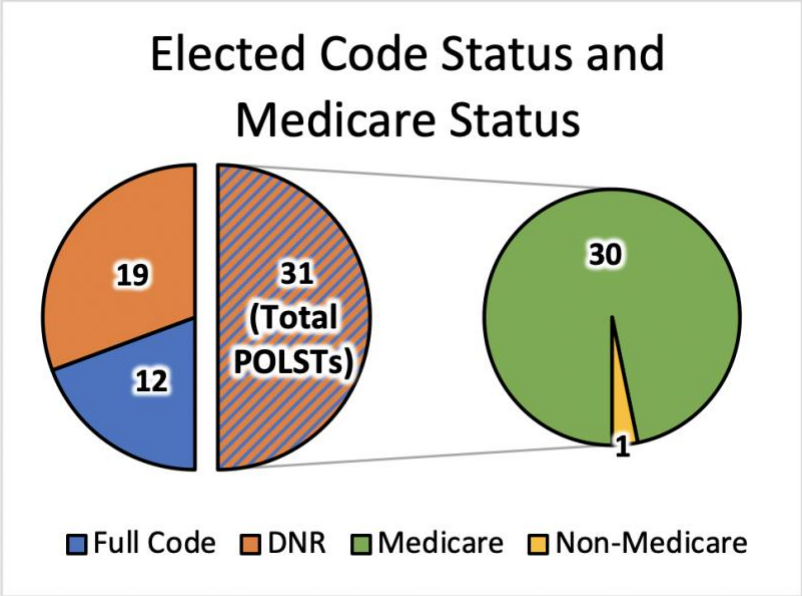
Note. Reprinted from *Evidence-Based Practice in Nursing and Healthcare: A Guide to Best Practice* (p. 286), by B.M. Melnyk & E. Fineout-Overholt, 2015, Wolters Kluwer Health.

Results

Data was collected from a period of December 18th, 2020 through February 18th, 2021. There was a total of 62 participants within the target population of age 55 and above. 50% of participants (31) filled out a POLST form during that office encounter. Figure 2 below shows that out of the 31 POLST completions, 61% (19) designated themselves as a *Do Not Resuscitate* (DNR). 30 out of the 31 participants had Medicare insurance, which allowed the office to bill for the ACP conversation. A total of $2,666 was generated using the CPT billing code 99497 for every Medicare patient that completed a POLST form.

Figure 2

Elected Code Status and Medicare Status



Survey results showed that 29% (18) were *very satisfied*, 58% (36) were *satisfied*, 11% (7) were *somewhat satisfied*, and 2% (1) were *not satisfied* with the education they received (See Figure 3). As can be seen in figure 4 below, 53% (33) of patients indicated that they learned something new, and 95% (59) indicated that they felt comfortable discussing end of life options with their provider after receiving the education.

The original benchmark goal was to achieve a satisfaction rating of at least 85%. When grouping the 2 highest ratings of satisfaction, a total of 87% of participants indicated that they were *satisfied* or *very satisfied* with the ACP education.

Figure 3

Patient Satisfaction with ACP

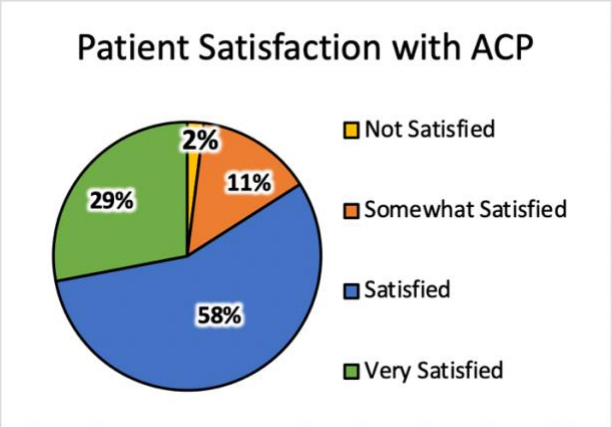
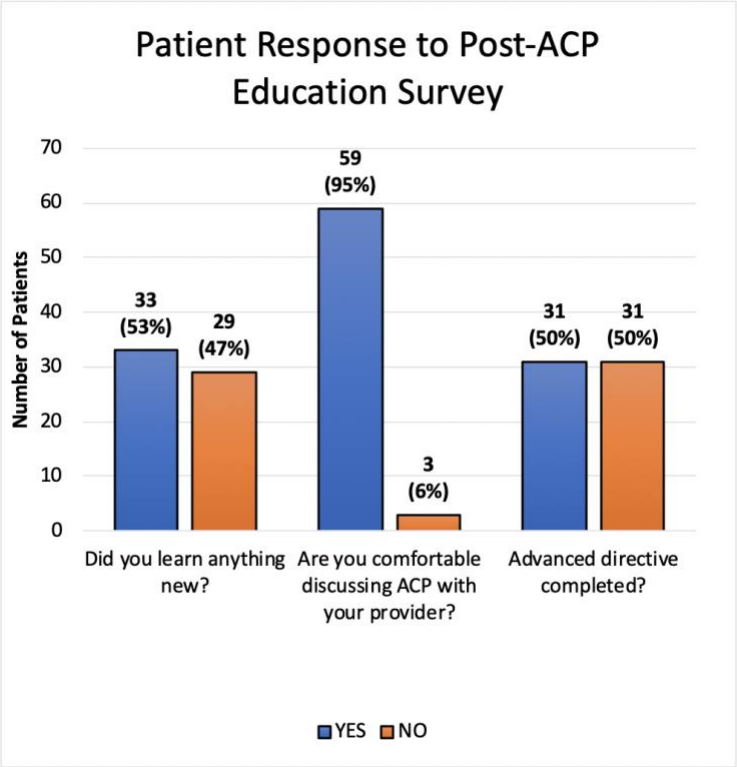


Figure 4

Patient Response to Post-ACP Education Survey



Cost-Benefit Analysis

Aside from the clinical practice benefits, a cost-benefit analysis supports the sustainability of this project due to both generated revenue and potential cost avoidance. The project costs totaled $0.20 per patient in printed material. There were no additional costs associated with training the medical assistants or the provider to help implement the project. When examining the financial benefits, this project generates $86 in revenue for each Medicare patient that completes a POLST form during the office visit, assuming that the ACP service is properly billed for.

When examining the potential cost avoidance, it is important to note that the average cost of an Intensive Care Unit (ICU) stay is approximately $4,300 per day for the room only ("Critical Care Statistics", 2020), and the average cost of operating a ventilator is approximately $400 per day ("Overview: Getting Patients", 2017). The $86 generated by Medicare billing for ACP and the potential costs savings of $4,700 if opting out of invasive treatments leads to a total project benefit of $4,786. If a patient chooses to designate themselves as DNR and opt out of these costly invasive treatments, we can expect a $23,930 savings for every dollar spent on this project, and a potential Return on Investment (ROI) of 2,291,900%.

If the patient prefers to receive all invasive treatments and agrees to potential hospitalization, the project benefits total $86 generated by Medicare ACP billing. In this scenario, there is a $430 savings for every dollar spent on this project, and a ROI of 42,900%. Regardless of decision in code status, the low program costs and potential benefits make this project very financially sustainable with the potential to save exponential healthcare costs.

Discussion

Limitations

Due to the COVID-19 pandemic, foot traffic within the primary care office was greatly reduced during the data collection period. This is largely attributed to the increased utilization of telehealth. It is assumed that a greater number of participants within the target population would have been recruited in different circumstances.

Compliance issues may have also contributed to the small study size. The medical assistant responsible for distributing the patient education and satisfaction surveys to the target population upon check-in was not 100% compliant in doing so. An inverse relationship was seen between busy or high stress days within the office and patient participants. It is assumed that

implementing a more consistent protocol would produce more favorable results and a higher number of completed POLSTs and surveys.

Implications for Practice

Based on the support of current literature and the results of this project, early initiation of ACP before serious illness occurs leads to an increased number of advanced directives on file, improves patient-provider communication, reduces healthcare costs associated with unwanted invasive treatments, increases patient satisfaction, and increases level of comfort in discussing end of life options.

It is the duty and responsibility of the provider to advocate for the best interest of their patients at all times and ensure they are properly educated with all pertinent information. By avoiding the conversation of ACP, not only does it contribute to the stigma of the topic, but it serves as an injustice to the patient and the patient's potential quality of life during an illness.

All primary care providers should prioritize consistent ACP within the primary care setting and frequently revisit the topic as often as necessary. Mortality is one human trait that is guaranteed among all of us. We may not always be able to predict when death happens or which ailment will be responsible for its cause, but we may be able to choose how we ultimately depart. Therein lies so much beauty, power, and peace.

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Appendix A

Educational ACP Handout Developed for DNP Research Project

Please review the following information as you wait for your appointment

Did you know that only 37% of Americans have an Advanced Directive on file?

An Advanced Directive is a document that states your medical wishes for end-of-life and emergency situations. The process of discussing medical decisions is called Advanced Care Planning. We encourage all patients to participate in Advanced Care Planning regardless of age, medical history, or pre-existing conditions.

If an emergency happens, does your primary care provider know your wishes for medical care? If you do not have your medical wishes on file, you may be subjected to unwanted invasive medical treatments. It's never too early to start planning!
We encourage you to fill out the attached Physician Orders for Life Sustaining Treatment (POLST) form if you do not have one on file. To help you complete the form, the different options are discussed below…

What Does CPR and Full Treatment Mean?
Full treatment means aggressive medical care if your heart stops or you stop breathing. You will be considered *Full Code* by medical professionals. This means you agree to Cardiopulmonary Resuscitation (CPR), intubation, and any other invasive medical treatments that may be necessary to save your life.

CPR is the process of forcefully pushing down on the chest repeatedly in order to maintain blood circulation. The chest compressions performed during CPR are very invasive and may result in broken ribs, but it is a necessary life-saving treatment if your heart stops. You may also require defibrillation, which is an electric shock given to your heart in order to restart it back into a normal rhythm.

Intubation involves a breathing tube placed down the throat to help you breathe if you cannot keep your airway open. The tube may be connected to a ventilator (breathing machine) if you are unable to take your own breaths. Breathing machines may only be needed for a short time, or may be needed long term. If you agree to *Full Treatment*, you may require a hospital stay during an emergency. You will be surrounded by lots of activity and be connected to various tubes and machines to help monitor you.

What is DNR?
DNR means Do Not Resuscitate. Choosing this option means you do NOT want CPR if your heart suddenly stops and you prefer to have a natural death. If you are DNR but also select *Full Treatmen*t, you agree to other potentially invasive medical interventions such as intubation if you stop breathing, and intravenous (IV) medications. If you are DNR and choose *Selective Treatment*, you agree to non-invasive medical treatment such as IV medication and non-invasive breathing masks if you need it. If you are DNR and choose *Comfort-Focused Treatment,*

your care will focus on relieving pain and keeping you as comfortable as possible with no invasive medical treatments.

What is Artificial Nutrition?

If you are unable to eat on your own, you may require artificial nutrition delivered by a feeding tube. Temporary feeding tubes are often placed through the nose and into the stomach to give you a liquid formula that has all the nutrients you need. If long-term tube feeding is needed, the feeding tube may be passed directly into your stomach through a small hole made through your abdomen. If your condition improves and you are able to tolerate food again, feeding tubes can be removed.

It is important to remember that these decisions can be changed any time, and as many times as you need to. Talk to your provider if you have any additional questions.

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